

SITEC

ENVIRONMENTAL

Civil and Environmental Engineering, Land Use
Planning, Hazardous and Solid Waste Consulting

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October 12, 2006

(Revised November 20, 2006)

(Revised December 29, 2006)

Department of Environmental Protection
Northeast Regional Office
205B Lowell Street
Wilmington, MA 01887

Attn: John Carrigan, Section Chief
Re: Crow Lane Landfill,
Newburyport, MA

Dear Mr. Carrigan:

On behalf of our client, New Ventures Associates, LLC, we are providing you with a construction plan for the sequenced closure and capping of the Crow Lane Landfill. This construction plan outlines a weekly timeline for achieving the regulatory and construction milestones that have been mutually agreed upon by the Department and New Ventures Associates, LLC for the fast track completion of this project. This schedule has been developed in collaboration with New Ventures Associates, LLC representatives and begins upon execution of the Agreement between New Ventures and the Department.

Plan for Sequenced Closure and Capping

Week 1

1. Complete approval process construction drawings and closure plan
2. Final negotiations / execute contracts with:
 - Undercap gas collection pipe installer
 - FML / geocomposite installer
 - FML supplier
 - Geocomposite supplier
 - Landfill gas well installer
 - Prefilter system vessel fabricator
 - Flare manufacturer
3. Order for Phases I & II
 - Gas collection pipe and fittings
 - Header pipe, fittings and valves
 - Geocomposite
 - FML
 - Stone / filter fabric for gas collection trenches

4. Prepare 1st half Phase I area
 - Remove tarps
 - Stake out pipe collection trenches and grade
 - Fine grade subgrade
 - Begin installation of collection pipes
5. Repair / replace haybales / silt fences around perimeter

Week 2

1. Complete Supplier / Installer Contracts
2. Follow-up on Supplier Deliveries for piping and fittings, fabric, valves, geocomposite and FML
3. Prepare 2nd half of Phase I Area:
 - Remove and relocate Tarps
 - Survey stake out of gas collection trenches and grades
 - Deliver fines/soil to achieve subgrade, Phase I
 - Fine grade subgrade and compact for gas piping and geocomposite installation
4. Install horizontal gas collection pipes within trenches
 - Complete 1st half of Phase I
 - Begin installation within 2nd half of Phase I
5. Place Temporary Tarps over inactive areas of landfill containing C&D fill
6. Begin installation of two new gas collection wells, Southwest area

Week 3

1. Follow-up on flare / pre-treatment system manufacturing progress
2. Follow-up on supplier deliveries
3. Deliver fines/soil to achieve subgrade
4. Complete installation of collection pipes Phase I
5. Begin installation of header pipes and valves, Phase I
6. Complete installation of temporary tarps

Week 4

1. Follow-up on flare / pre-treatment system manufacturing progress
2. Follow-up on supplier deliveries
3. Complete installation of header pipes and valves, Phase I
4. Begin mobilizing FML/Geocomposite installer to site
5. Complete installation of two gas collection wells Southwest area
6. Deliver fines/soil for grading / shaping

Week 5

1. Follow-up on flare / pre-treatment system manufacturing
2. Concurrent installation of geocomposite and FML, Phase I area
3. Stormwater conveyance system Phase I area

- Construct swale at top of berm along north side of Phase I
- Install stone lined channel from swale to Basin 2
- 4. Prepare 1st half Phase II area
 - Remove tarps
 - Stake out pipe collection trenches and grades
 - Deliver fines/soil to achieve subgrade
 - Fine grade subgrade and compact
- 5. Install gas collection pipes
 - Begin 1st half Phase II

Week 6

1. Follow-up on flare / pre-treatment system manufacturing process
2. Follow-up on remaining supplier deliveries, Phase II
3. Complete preparation of 1st half Phase II
4. Prepare 2nd half Phase II area
 - Remove tarps
 - Stake out pipe collection trenches and grades
 - Deliver fines to achieve subgrade
 - Fine grade subgrade
5. Complete installation of collection pipes 1st half Phase II
6. Begin installation of collection pipes 2nd half Phase II
7. Concurrent installation of Geocomposite and FML Phase I

Week 7

1. Follow-up on flare / pre-treatment system manufacturing
2. Complete subgrade preparation 2nd half Phase II
3. Continue installation collection pipes 2nd half Phase II
4. Complete concurrent installation of geocomposite and FML Phase I
5. Connect Phase I area header pipe to landfill gas pretreatment / flare extraction / destruction system
6. Complete installation of collection pipes 2nd half Phase II
7. Grading / shaping area IA

Week 8

1. Follow-up on flare / pretreatment manufacturing
2. Complete installation collection pipes 2nd half Phase II
3. Install header pipe and valves Phase II area
4. Begin concurrent installation of geocomposite / FML Phase II
5. Grading / shaping IA area

Week 9

1. Follow-up on flare / pretreatment system manufacturing

2. Complete installation header pipes and valves Phase II area
3. Concurrent installation geocomposite / FML Phase II area
4. Grading / shaping IA area

Week 10

1. Follow-up flare / pretreatment system manufacturing
2. Concurrent installation geocomposite / FML Phase II area
3. Grading / shaping IA area
4. Order materials for Phase IA, IIA and III areas, (Spring delivery)
5. Grading / shaping IA area
6. Begin drilling / blasting Detention Pond 2

Week 11

Week Ending January 6, 2007

1. Complete concurrent installation geocomposite / FML Phase II area
2. Connect Phase II Area header pipe to landfill gas pre-treatment and flare system
3. Grading / shaping IA area
4. Drilling / blasting Detention Pond 2
5. Begin construction of west side berm
6. Submission of Cornerstone Environmental Group, Inc. design plans for the full build-out of the landfill gas system and final capping system material modifications.
7. Submission of revised SITEC Corrective Action Design (CAD) drawings to coordinate with and reference the gas and final closure details prepared by Cornerstone. The SITEC drawings will also include additional site plan and detail sheet modifications associated with the storm water management system that address technical comments from the City of Newburyport's consultant concerning the easterly wetland and the vernal pool. Narrative text and calculations will also be provided.
8. Submission of preliminary technical data and narrative text relative to the perimeter berm stability analysis including the results of material testing done to date.

Week 12

1. Delivery / installation of enclosed flare
2. Grading / shaping IA area
3. Drilling blasting Detention Pond 2
4. Continue construction of west side berm

Weeks 13

Week Ending January 20, 2007

1. Temporary cover IA area with tarps
2. Grading / shaping IIA area
3. Excavation and fit out of Detention Pond 2
4. Continue construction west side berm
5. Submission of a final stability analysis for the perimeter berm along with revised Corrective Action Design (CAD) drawings and details of proposed berm design modifications, should they be required.

Weeks 14 and 15

1. Temporary cover IA area with tarps
2. Grading / shaping IIA area
3. Excavation and fit out of Detention Pond 2
4. Continue construction west side berm

Week 16

1. Same as 13, 14, 15 above
2. Delivery / installation H₂S pretreatment system

Weeks 17, 18, 19, 20

1. Same as 13, 14, 15 above

Week 21

1. Prepare Area IA
 - Remove temporary tarps / place over IIA area
 - Stake out pipe collection trenches and grades IA
 - Fine grade subgrade
2. Begin installation of collection pipe IA area
3. Begin grading / shaping Area III

Week 22

1. Complete preparation area IA
2. Installation of collection pipe IA
3. Grading / shaping area III

Week 23

1. Installation collection pipe IA
2. Grading / shaping area III

Week 24

1. Installation header pipe and valves / area IA
2. Mobilization geocomposite / FML installer
3. Grading / shaping Area III

Week 25 and 26

1. Concurrent installation geocomposite and FML Area IA
2. Grading / shaping Area III
3. Drilling / blasting Detention Pond 1

Week 27

1. Complete installation geocomposite and FML Area IA
2. Connect header pipe from Area IA to landfill gas pretreatment system and flare
3. Excavate Detention Pond 1
4. Grading / shaping Area III

Week 28

1. Prepare Area IIA
 - Remove temporary tarps, place over Area III
 - Stake out pipe collection trenches and grades, Area IIA
 - Fine grade subgrade, Area IIA
2. Begin installation of collection pipes Area IA
3. Fit out Detention Pond 1
4. Grading / shaping Area III

Week 29

1. Complete fine grading Area IIA
2. Install collection pipes Area IIA
3. Grading / shaping Area III
4. Complete fitting out Detention Pond 1

Week 30

1. Install header pipe and valves Area IIA
2. Mobilization geocomposite / FML installer
3. Grading / shaping Area III
4. Construct discharge conveyance swale from Detention Pond 1

Week 31

1. Concurrent installation geocomposite / FML Area IIA
2. Fine grading Area III
3. Construct Area III
4. Construct discharge conveyance swale from Detention Pond 1

Week 32

1. Concurrent installation geocomposite / FML Area IIA
2. Begin installation collection pipes Area III
3. Complete discharge conveyances from Pond 1

Week 33

1. Complete installation geocomposite / FML Area IIA
2. Installation collection pipes Area III

Week 34

1. Complete installation collection pipes Area III
2. Mobilize geocomposite / FML contractor to Area III
3. Install header piping and valves, Area III
4. Begin delivery / spreading drainage sand over FML

Week 35 and 36

1. Complete geocomposite / FML Area III
2. Connect header pipe Area III to landfill gas pretreatment system and flare
3. Delivery / placement drainage sand over FML

Week 37

1. Complete details of stormwater conveyance / discharge system
2. Delivery / placement drainage sand over FML

Week 38 through 41

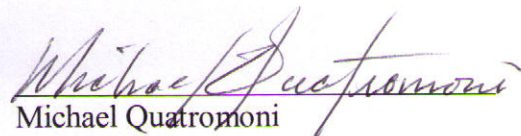
1. Delivery / placement loam
2. Deliver / placement slope treatment over berm slopes
3. Complete cap details

Week 42

1. Hydroseeding

Should you have any questions please contact Steve Trettel at 781.760.6035 or me. Thank you in advance for your prompt review of this submittal.

Sincerely,
SITEC Environmental, Inc.


Michael Quatromoni
Project Manager

Cc:
W. Thibeault, New Ventures
S. Trettel, PE, New Ventures